



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,191	05/06/2004	Nicola M. Funnell	1578.612 (11766-US-PAT)	7248
44298	7590	04/29/2009	EXAMINER	
DOCKET CLERK PO BOX 12608 DALLAS, TX 75225			SAFAIPOUR, BOBBAK	
			ART UNIT	PAPER NUMBER
			2618	
			NOTIFICATION DATE	DELIVERY MODE
			04/29/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket.clerk@kelly-krause.com

# Office Action Summary

**Application No.**

10/840,191

**Applicant(s)**

FUNNELL ET AL.

**Examiner**

BOBBAK SAFAIPOUR

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 33-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Action is in response to Applicant's response filed on 02/06/2009. Claims 1-32 have been cancelled. Claims 33-65 are still pending in the present application.

#### ***Response to Arguments***

Applicant's arguments have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **3GPP TS 25.304 V4.50 (2002-06); UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode**.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 33-36, 40-45, and 49-50** are rejected under 35 U.S.C. 102(b) as being anticipated by **3GPP TS 25.304 V4.50 (2002-06); UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode (hereinafter 3GPP)**.

Consider **claim 33**, 3GPP discloses a method to select a cell in a mobile communications equipment (MCE) when transitioning from a connected mode state to an idle mode state, the MCE configurable for use in a cellular network, the method comprising:

Art Unit: 2618

beginning state transition activity, the MCE currently in the connected mode state (5.2.7.1: read as Cell Selection when leaving connected mode);

identifying a candidate cell set, the candidate cell set members corresponding to UMTS- based (read as UTRA case) candidate cells, wherein at least one of the set of candidate cells is a cell which is not currently supporting the connected mode state (5.2.7.1: read as candidate cells for this selection are the cell(s) used immediately before leaving connected mode), and

selecting a candidate cell from the identified set of candidate cells (5.2.7.1: read as selection of cells);

transitioning to an idle mode state (5.2.7.1: read as when returning to idle mode)

Consider **claim 42**, 3GPP discloses a mobile communications equipment (MCE) configured for use in a cellular network, comprising: a processor and operating environment configured to run software processes, the software processes configured to enable the MCE to transition from a connected mode state to an idle mode state (5.2.7.1: read as when returning to idle mode), and to determine a set of UMTS-based (read as UTRA case) candidate cells, wherein at least one of the set of candidate cells is a cell which is not currently supporting the connected mode state (5.2.7.1: read as candidate cells for this selection are the cell(s) used immediately before leaving connected mode), and further configured to select a candidate cell from the identified set of candidate cells (5.2.7.1: read as selection of cells) and to use the selected member when transitioning to the idle mode state (5.2.7.1: read as when returning to idle mode).

Consider **claims 34 and 43**, and as **applied to claims 33 and 42 above**, **respectively**, 3GPP discloses the claimed invention wherein said at least one of the candidate cells which is not currently supporting the connected mode state is a cell identified to the MCE by a network. (5.2.7.1: read as UE shall select a suitable cell to camp on)

Consider **claims 35 and 44** and as **applied to claims 33 and 42 above**, **respectively**, 3GPP discloses the claimed invention wherein said at least one of the candidate cells which is not currently supporting the connected mode state is a cell neighboring a cell supporting the connected mode state. (5.2.7.1: read as UE shall select a suitable cell to camp on)

Consider **claims 36 and 45** and as **applied to claims 33 and 42 above**, **respectively**, 3GPP discloses the claimed invention wherein storing information relating to at least one candidate cell which is not currently supporting the connected mode state arising from past data gathering by the MCE. (5.2.7.1: read as Stored information cell selection procedure)

Consider **claims 40 and 49**, and as **applied to claims 33 and 42 above**, **respectively**, 3GPP discloses the claimed invention wherein the identified candidate cell set comprises active cell(s) used to support the connected mode state. (3GPP: 5.2.7.1)

Consider **claims 41 and 50**, and as **applied to claims 33 and 42 above**, **respectively**, 3GPP discloses the claimed invention wherein the identified candidate cell set comprises the serving cell used to support the connected mode state. (3GPP: 5.2.7.1)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 37-38 and 46-47** are rejected under 35 U.S.C. 103(a) as being unpatentable over **3GPP TS 25.304 V4.50 (2002-06); UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode (hereinafter 3GPP)** in view of **Czaja et al. (US 7,006,828 B1; hereinafter Czaja)**.

Consider **claim 37**, and as **applied to claim 36 above**, 3GPP discloses the claimed invention except for wherein said stored information comprises power measurement data.

In related art, Czaja discloses stored information comprises power measurement data. (col 3, lines 2-25; As the mobile station moves and its currently active base station signal weakens, the mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communicates with a different base station(s).)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of 3GPP to monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

Consider **claim 38**, and as applied to **claim 37 above**, 3GPP, as modified by Czaja, discloses the claimed invention wherein storing information comprising power measurements with respect to a plurality of candidate cells of the identified candidate cell set, the information gathered previous to the beginning state transition activity; and selecting the selected candidate cell based at least in part on said power measurements. (Czaja: col 3, lines 2-25)

Consider **claim 46**, and as applied to **claim 45 above**, 3GPP discloses the claimed invention except for wherein said stored information comprises power measurement data.

In related art, Czaja discloses stored information comprises power measurement data. (col 3, lines 2-25; As the mobile station moves and its currently active base station

Art Unit: 2618

signal weakens, the mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communicates with a different base station(s).)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of 3GPP to monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

Consider **claim 47**, and **as applied to claim 46 above**, 3GPP, as modified by Czaja, discloses the claimed invention wherein storing information comprising power measurements with respect to a plurality of candidate cells of the identified candidate cell set, the information gathered previous to the beginning state transition activity; and selecting the selected candidate cell based at least in part on said power measurements. (Czaja: col 3, lines 2-25)

**Claims 39, 48, 51-54, 57-62, and 64-65** are rejected under 35 U.S.C. 103(a) as being unpatentable over **3GPP TS 25.304 V4.50 (2002-06); UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode (hereinafter 3GPP)**.

Consider **claim 51**, 3GPP discloses a method to select a cell in a mobile communications equipment (MCE) when transitioning from a first connected mode state to a second connected mode state, the MCE configurable for use in a cellular network, the method comprising:



Art Unit: 2618

beginning state transition activity, the MCE currently in the first connected mode state (5.2.7.1: read as Cell Selection when leaving connected mode);

identifying a candidate cell set, the candidate cell set members corresponding to UMTS- based (read as UTRA case) candidate cells, wherein at least one of the set of candidate cells is a cell which is not currently supporting the first connected mode state (5.2.7.1: read as candidate cells for this selection are the cell(s) used immediately before leaving connected mode), and

selecting a candidate cell from the identified set of candidate cells (5.2.7.1: read as selection of cells);

transitioning to the second connected mode state using the selected candidate cell (5.2.7.1: read as when returning to idle mode)

3GPP fails to specifically disclose the first and second mode states are, each, one of, Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH.

In related art, 3GPP discloses where the connected mode state comprises one of Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH. (3GPP 8.2; SCCPCH selection when entering Connected Mode)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of 3GPP 8.2 into the teachings of 3GPP 5.2.7.1 in order to enter the connected mode from idle mode.

Consider **claim 59**, 3GPP discloses a mobile communications equipment (MCE) configured for use in a cellular network, comprising: a processor and operating environment configured to run software processes, the software processes configured to

Art Unit: 2618

enable the MCE to transition from a connected mode state to an idle mode state (5.2.7.1: read as when returning to idle mode), and to determine a set of UMTS-based (read as UTRA case) candidate cells, wherein at least one of the set of candidate cells is a cell which is not currently supporting the connected mode state (5.2.7.1: read as candidate cells for this selection are the cell(s) used immediately before leaving connected mode), and further configured to select a candidate cell from the identified set of candidate cells (5.2.7.1: read as selection of cells) and to use the selected member when transitioning to the idle mode state (5.2.7.1: read as when returning to idle mode).

3GPP fails to specifically disclose the first and second mode states are, each, one of, Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH.

In related art, 3GPP discloses where the connected mode state comprises one of Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH. (3GPP 8.2; SCCPCH selection when entering Connected Mode)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of 3GPP 8.2 into the teachings of 3GPP 5.2.7.1 in order to enter the connected mode from idle mode.

Consider **claim 39**, and as applied to **claim 33** above, 3GPP section 5.2.7.1 discloses the claimed invention except for where the connected mode state comprises one of Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH.

In related art, 3GPP discloses where the connected mode state comprises one of Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH. (3GPP 8.2; SCCPCH selection when entering Connected Mode)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of 3GPP 8.2 into the teachings of 3GPP 5.2.7.1 in order to enter the connected mode from idle mode.

Consider **claim 48**, and as **applied to claim 42 above**, 3GPP section 5.2.7.1 discloses the claimed invention except for where the connected mode state comprises one of Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH.

In related art, 3GPP discloses where the connected mode state comprises one of Cell\_DCH, Cell\_FACH, Cell\_PCH, and URA\_PCH. (3GPP 8.2; SCCPCH selection when entering Connected Mode)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of 3GPP 8.2 into the teachings of 3GPP 5.2.7.1 in order to enter the connected mode from idle mode.

Consider **claims 52 and 60**, and as **applied to claim 51 and 59 above**, **respectively**, 3GPP discloses the claimed invention wherein said at least one of the candidate cells which is not currently supporting the connected mode state is a cell identified to the MCE by a network. (5.2.7.1: read as UE shall select a suitable cell to camp on)

Consider **claims 53 and 61**, and as **applied to claim 51 and 59 above**, **respectively**, 3GPP discloses the claimed invention wherein said at least one of the candidate cells which is not currently supporting the connected mode state is a cell

neighboring a cell supporting the connected mode state. (5.2.7.1: read as UE shall select a suitable cell to camp on)

Consider **claim 54**, and **as applied to claim 51 above**, 3GPP discloses the claimed invention wherein storing information relating to at least one candidate cell which is not currently supporting the connected mode state arising from past data gathering by the MCE. (5.2.7.1: read as Stored information cell selection procedure)

Consider **claim 57**, and **as applied to claim 51**, 3GPP discloses the claimed invention wherein the identified candidate cell set comprises active cell(s) used to support the connected mode state. (3GPP: 5.2.7.1)

Consider **claim 58**, and **as applied to claim 51**, 3GPP discloses the claimed invention wherein the identified candidate cell set comprises the serving cell used to support the connected mode state. (3GPP: 5.2.7.1)

Consider **claim 62** and **as applied to claim 59 above** 3GPP discloses the claimed invention wherein storing information relating to at least one candidate cell which is not currently supporting the connected mode state arising from past data gathering by the MCE. (5.2.7.1: read as Stored information cell selection procedure)

Consider **claim 64**, and **as applied to claim 59 above**, 3GPP discloses the claimed invention wherein the identified candidate cell set comprises active cell(s) used

Art Unit: 2618

to support the connected mode state. (3GPP: 5.2.7.1)

Consider **claim 65**, and as applied to **claim 59 above**, 3GPP discloses the claimed invention wherein the identified candidate cell set comprises the serving cell used to support the connected mode state. (3GPP: 5.2.7.1)

**Claims 55-56 and 63** are rejected under 35 U.S.C. 103(a) as being unpatentable over **3GPP TS 25.304 V4.50 (2002-06); UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode (hereinafter 3GPP) section 5.2.7.1** in view of **3GPP TS 25.304 V4.50 (2002-06); UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode (hereinafter 3GPP) section 8.2** and in further view of **Czaja et al. (US 7,006,828 B1; hereinafter Czaja)**.

Consider **claim 55**, and as applied to **claim 54 above**, 3GPP discloses the claimed invention except for wherein said stored information comprises power measurement data.

In related art, Czaja discloses stored information comprises power measurement data. (col 3, lines 2-25; As the mobile station moves and its currently active base station signal weakens, the mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communicates with a different base station(s).)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of 3GPP to

Art Unit: 2618

monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

Consider **claim 56**, and as applied to **claim 55 above**, 3GPP, as modified by Czaja, discloses the claimed invention wherein storing information comprising power measurements with respect to a plurality of candidate cells of the identified candidate cell set, the information gathered previous to the beginning state transition activity; and selecting the selected candidate cell based at least in part on said power measurements. (Czaja: col 3, lines 2-25)

Consider **claim 63**, and as applied to **claim 62 above**, 3GPP discloses the claimed invention except for wherein storing information comprising power measurements with respect to a plurality of candidate cells of the identified candidate cell set, the information gathered previous to the beginning state transition activity; and selecting the selected candidate cell based at least in part on said power measurements.

In related art, Czaja discloses stored information comprises power measurement data. (col 3, lines 2-25; As the mobile station moves and its currently active base station signal weakens, the mobile station must access a new base station. Based upon the results of the searcher function, and the instructions received from the base station, the mobile station updates its sets, and communicates with a different base station(s).)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Czaja into the teachings of 3GPP to

monitor the channel conditions for all base station in an active set of a selected mobile station and determine the relative strengths of base stations based on the monitored channel conditions.

***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipoor whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Bobbak Safaipoor  
B.S./bs

April 24, 2009

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618